

In the Claims

1. (Currently Amended) A method for disrupting expression of a mammalian target gene ~~expression~~ at the mRNA level in a human cell, wherein the method comprises initiating RNA interference (RNAi) *in vitro* by exposing the human cell to a double stranded RNA (dsRNA) homologous to the target gene, wherein the dsRNA consists essentially of two complementary linearized strands of RNA, the transcription of each is independently controlled to generate paired RNAs of defined length.

2. (Previously Amended) The method of claim 1, wherein the human cell is from a cell line.

Claims 3-4 Cancelled.

5. (Previously Amended) The method of claim 1, wherein the function of the target gene is disrupted.

Claim 6 Cancelled.

7. (Previously Amended) The method of claim 1, wherein the human cell is a melanoma, leukemia, tumor, or transformed cell.

8. (Previously Amended) The method of claim 7, wherein the tumor cell is malignant.

9. (Currently Amended) The method of claim 1, ~~wherein~~ comprising formulating the double stranded RNA is as part of a pharmaceutical composition.

Claim 10 Cancelled.

11. (Currently Amended) The method of claim 9, wherein the pharmaceutical composition comprising the dsRNA is used to treat targets a human disease in the human cell.

Claims 12-20 Cancelled.

21. (Currently Amended) The method of claim 11, wherein the human disease targeted by the RNAi in the method is cancer.

22. (Currently Amended) A method for disrupting expression of a mammalian target gene ~~expression~~ *in vitro* at the mRNA level in a human cell, wherein the method comprises providing

small interfering RNA guide sequences which are homologous to a portion of the target gene, such that RNAi of the target gene is induced.

23. (Currently Amended) The method of claim 22, wherein the method further comprises providing to the human cell ~~a population of the human cells~~ an effective amount of KdsRNA as the interfering RNA guide sequence to initiate RNA interference, thereby effecting disruption of target gene expression of KitR when it is the target gene in the cell. ~~at the mRNA level.~~

24. (Currently Amended) The method of claim 22, wherein the human ~~cells are~~ cell resides within a population of melanoma, leukemia, tumor or transformed cells.

25. (Currently Amended) The method of claim 24, wherein the ~~cells are~~ cell is malignant.

26. (Currently Amended) The method of claim 22, ~~wherein~~ comprising formulating the interfering RNA ~~comprises~~ as part of a pharmaceutical formulation.

27. (Currently Amended) The method of claim 26, wherein the pharmaceutical composition comprising the dsRNA ~~is used to treat~~ targets a human disease or disorders in the human cell.